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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,893	08/18/2003	Terry Vovan	03/143	3878

7590 08/14/2009

LEON D. ROSEN
FREILICH, HORNBAKER & ROSEN
Suite 1220
10960 Wilshire Boulevard
Los Angeles, CA 90024

EXAMINER	
THAKUR, VIREN A	
ART UNIT	PAPER NUMBER
1794	

MAIL DATE	DELIVERY MODE
08/14/2009	PAPER

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/645,893
Filing Date: August 18, 2003
Appellant(s): VOVAN, TERRY

Leon D. Rosen
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed May 3, 2009 appealing from the Office action mailed December 15, 2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

US 5,613,607	KALMANIDES et al.	3-1997
US 4,671,263	DRAENERT	6-1987
US 1,515,560	ELWELL	11-1924
US 5,975,322	REID	11-1999
US 5,810,209	FOSTER	9-1998
US 7,198,169	SILK	4-2007
US 4,305,180	SCHWARTZ	12-1981
US 3,371,817	GASBARRA et al.	3-1968
US 1,582,429	PODEL	4-1926
US 4,279,355	SCHWARTZ et al.	7-1981
US 4,158,983	AMICO	6-1979

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

- **Claims 5-7 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalmanides et al. (US 5613607) in view of Elwell (US 1515560), Draenert (US 4671263), Silk (US 7198169), Reid (US 5975322), Schwartz (US 4305180), Foster (US 5810209), and in further view of Gasbarra et al. (US 3371817), Podel (US 1582429), Schwartz et al. (US 4279355) and Amico (US 4158983).**

Regarding claims 5 and 18, Kalmanides et al. teach a cake container (figure 2 and column 4, lines 9-15) that includes a base (figure 2, item 37) lying on a vertical container axis, said base having a cake supporting base surface (figure 4) having a largely cylindrical base peripheral wall (see figure 2, wall of base and column 7, lines 17-21) which extends around the cake supporting base surface. This can further be seen in figure 2, item 20, wherein the container cover locks into place *within* the

base, wherein the base comprises a wall which locks the cover into place. The cake container also includes a cover (figure 2, item 20) that has a height greater than the base and has a largely cylindrical cover peripheral wall centered on the container axis. The base and the cover are each formed of a plastic sheet that has been deformed (column 6, lines 15-17) and the cover can be formed of a transparent plastic sheet (column 6, lines 31-43 and column 10, lines 64-66).

It is noted that Kalmanides et al. teach outwardly projecting regions on the cover, as shown in figure 2, item 30 and further teach the cover having radial projections, as shown in figures 10-24. On column 11, lines 7-17 and column 11, line 66 to column 12, line 11, Kalmanides et al. teach using radially extending ridges which inter-engage with a receiving portion on the base. It is noted that claim 18 does not distinguish whether the outwardly projecting dimples are on the base or on the cover. Kalmanides et al. already teaches using a cover and a base with an inter-engagement locking feature, wherein a locking ridge is placed within a receiving portion and turned radially to lock the cover into the base. Nevertheless, Kalmanides et al. also broadly teaches the concept of a radially extending portion which inter-engages with a complementary receiving portion for the purpose of providing securement of a cake cover to the base as evidenced by figure 2.

Nevertheless, claim 5 differs in specifically reciting the orientation of the locking elements and the receiving regions: the base peripheral wall has a plurality of outwardly-projecting dimples and said cover peripheral wall has a plurality of dimple-receiving regions. The cake container taught in the embodiment depicted by

figure 2 of Kalmanides et al. has an opposite orientation of the location of the projections and the complementary receiving portions into which the projections lock: the cover has the projections and the base has the receiving portions.

In any case, Elwell teaches the concept of the base having the radial projection with the cover having the receiving portion (Figure 1, items 30 and 15). Additionally, Draenert has been relied on to further teach the conventionality of the concept of the base having the projection and the cover having the receiving channel (Figure 2, item 12 and Figure 1, items 14 and 16). Elwell and Draenert are analogous to Kalmanides et al. in teaching the particular orientation of the locking mechanisms for a first portion (cover) and a second portion (base). Elwell is even directed to a lid and base of a container. While Draenert discloses an apparatus for dispensing a material from the nozzle of said apparatus, Draenert is still analogous in teaching a covering element that is locked to the base element, wherein the radially extending projections are on the base element and the complementary receiving portions are on the cover element. The prior art thus provides the teaching of the conventionality of locking elements on the base, with the receiving locking regions on the cover wherein the cover must be rotated to receive and lock onto the base. To therefore place the radially outwardly projecting portions on the base with the receiving portions on the cover would have been a reversal of parts that would have been an obvious matter of design and/or choice.

Claims 5-7 and 18-19 further differ from the combination in the particulars of the shape of the projection and the projection receiving end - that is, dimples and

dimple receiving regions that are employed for locking the cover to the base member and providing radial deflection through a narrowing transition region.

Specifically, claims 5 and 18 recite wherein said dimple-receiving regions each have a chimney about as wide as one of said dimples to receive a dimple in a chimney upper portion by the cover being lowered around the base while chimney lower ends initially lie directly over said dimples. Claims 5 and 18 further recite wherein the dimple-receiving regions each having a dimple-receiving cavity connected to one of said chimney upper portions to receive one of said dimples when the cover is turned about said cover axis after the dimple has reached said chimney upper portion.

Essentially, the above cited portion of claims 5 and 18 recite a particular shape of a bayonet style locking feature that has been conventionally employed in the art for the purpose of locking two portions together, as is detailed by the secondary references below. It is noted that the chimney is simply a vertical channel/conduit through which the protrusion passes before the cover is rotated for locking the protrusion into place.

It is noted that Kalmanides et al. teaches the concept of a cover engaging a base member, wherein the cover member is arcuately rotated relative to the base (figure 17, 18, 23, 26 and 27 and column 11, lines 38-45). As can be seen from the above mentioned figures, the receiving region comprises a chimney which can best be shown as the region encompassed by item 82 and 80 in figure 23. This chimney is considered about as wide as the protrusion (figure 26, item 60) which will be

received there into. If the chimney was not "about as wide" as the protrusion that it accepts, then there would not have been any apparent way for the two portions to lock together, since the purpose of an inter-engaging style locking element is for one portion to intimately mate with the receiving portion (i.e. a male/female locking feature) for the purpose of providing a secured engagement between the two. After the base receives the protrusion from the cover, the cover is rotated for providing the actual locking of the cover and base together. Therefore, Kalmanides et al. teaches an embodiment that teaches the particular chimney configuration, as recited in claims 5 and 18.

In addition, the references to Silk (Figure 7, item 76) and Draenert (Figure 2, item 12 and Figure 1, items 14 and 16) further teach the conventionality of the concept of a chimney about as wide as the locking element. For instance, figure 7 of the Silk reference teaches a protrusion (88) on a cover element (92) which is received in a chimney (figure 7, item 76) that is about as wide as the protrusion and even teaches providing a protrusion (i.e dimple) receiving cavity into which the protrusion rests for completing the locking relationship (figure 7, item 78). Additionally, Draenert also teaches this concept, as shown by figure 2, item 1 and figure 1, items 14 and 16). Regarding the concept of the receiving member comprising the chimney also have a cavity to receive one of the protrusions when the cover is turned about the cover axis after the protrusion has reached the chimney upper portion, it is noted that Kalmanides et al. also teach this concept, by teaching rotating the base after the protrusions (figure 26, item 60) are received in

the chimney. (Regarding reaching the claim limitation of reaching "the chimney upper portion" this would have been an obvious matter of choice and/or design, depending on which of the protrusion and the protrusion receiving portion was on the base and the cover, as discussed above with respect to Elwell and Draenert). After rotating the cover, the protrusion (item 60) passes through a narrowed transition region. The narrowed transition region and the locking of the cover to the base is described on column 13, lines 14-25 and 31-39 of Kalmanides et al. The chimney guides the ridge (60) and the ridge (60) passes through a narrowing region (see the diagonal between item 77 and item 81 of figure 23) to fit into the locking ledge (see items 78 and 79 of figure 23 and 26). This locking ledge has a triangular shape similar to that of the protrusion and is the protrusion receiving cavity. Silk also evidences this dimple receiving cavity in figure 7, item 78). In view of these teachings, it is noted that, applicant has essentially described a bayonet style locking element, which Kalmanides et al. as further supported by the references to Draenert and Silk, teaches has been conventionally employed for its art recognized purpose of locking two elements together.

Regarding the radial deflection as recited in claims 5 and 18, it is noted that in figure 26, Kalmanides further teaches that protrusion (60) is first being placed into the chimney (82) and then being snapped through a narrowed transition region. Kalmanides et al. further teaches that the ridge (60) becomes disengaged from the chimney (80) and then locks into tab (81), and this process results in an audible snapping sound (column 13, lines 48-67). Since the protrusion (60) is a triangle that

radially protrudes from the cover, and since the protrusion receiving cavity is also of a triangular shape, when turning the base to place the triangular protrusion into the triangular receiving portion, it would have been obvious that this would have resulted in passing the triangular protrusion through a narrowed transition. It would have been readily recognized by the ordinarily skilled artisan that this narrowing causes a deflection and thus is a primary function of ensuring that the lid of Kalmanides et al. is securely locked in place. The audible sound produced by locking, in and of itself, teaches that the cover and base must deflect to some degree across a narrowed transition, in order to cause a snapping sound. Furthermore it would have been obvious for deflection to occur, since the cover must be rotated over the base, and the ridge is guided through a chimney (80) and forced through a narrowing into a receiving region. This is further supported by Kalmanides et al.'s disclosure on column 14, lines 5-23, with respect to the opening of the container. A force is applied to release the cover from the base. Therefore, it would have been obvious that a force was also applied to the cover in order to push the ridge into the receiving locking section, while also causing an audible snapping sound.

Nevertheless, Kalmanides is not completely clear as to whether the deflection is radial. As can be seen from figure 26, the deflection appears vertical, in order for the triangle to pass through the narrowed region of the receiving portion and then snap into the corresponding triangular shaped cavity.

In any case, the reference to Reid has been relied on for further evidence of the conventionality of providing a radially extending and deflecting portion for the

purpose of providing a locking engagement of a cover to a base (figure 4, item 43 and 53). Item 53 would be considered a radial narrowing, since there is a channel into which the projection (43) is received and the depth of the receiving region can be seen to narrow radially, as a result of item 53. Reid further teaches on column 6, lines 22-37 that the lug (43) crosses over this radial narrowing (53), which is shallower than the threads 23. Reid further teaches on column 6, lines 50-57, that the plastic is resilient so as to allow for "snapping fit," thus teaching radial deflection of the narrowing.

Analogously, Schwartz teaches in figure 2, an element that is guided through a channel and must deflect in order to lock into the element receiving region.

Silk also shows this concept in figures 7-9. The radial narrowing through which Silk's lug must deflect can be seen in figure 9, item 84.

Foster, in figure 7 and column 6, lines 7-13 and lines 28-33 teaches tabs that extend radially from the bottle neck across which lugs 116 must pass. When the lugs pass over these radial narrowing regions, the lug falls into recess 136 and resists circumferential and vertical movement (column 6, lines 16-33).

Draenert also teaches bayonet type locking features (Figure 1, items 14 and 16 and column 10, lines 27-38), wherein the bayonet lock is a snap closure that engages a pin (16). By snapping there would have been expected to have been deflection. The references to Reid, Schwartz, and Foster are also analogous to Kalmanides et al. in teaching radial deflection of a locking protrusion and wherein the protrusion then sits within a receiving cavity, for the purpose of locking a cover /

base together. The art is thus replete with teachings of the conventionality of a locking mechanism having a radial narrowing over which a dimple must pass, for the purpose of securing the dimple into a locking region. Kalmanides et al. is also similar to these locking mechanisms in that Kalmanides et al. also teach a chimney to receive a protrusion and then turning a cover for the purpose of sending the protrusion through a narrowed transition and then locking the protrusion in a protrusion receiving cavity. To therefore modify the similar locking mechanism of Kalmanides et al., where the locking ridge deflects through a narrowing, with an analogous locking mechanism wherein the narrowing is radial and the locking ridge passes over this radial narrowing to sit within a locking region and thus wherein the deflection occurs radially as opposed to vertically, would have been an obvious matter of design and/or choice for the purpose of achieving the desired securement of the cover to the base, in view of the art taken as a whole. Regarding the specific shape, it is noted that to use a dimple would have been an obvious matter of design and/or choice, since the art teaches radial deflection as a result of passing a locking ridge over a radial narrowing and then placing the locking ridge into a locking region, wherein the locking region conforms to the shape of the locking ridge element. This discussion also addresses the narrowed transition, as recited in claims 6, 18 and 19

Therefore, in view of the teachings of these references it is noted that the concept of employing a chimney to receive a protrusion, wherein the chimney facilitates locking of the protrusion, has been a conventional expedient for locking two elements such as a cover and a base together. Kalmanides et al. teaches a

"bayonet" style locking element and the references to Elwell, Drawnert, Silk, Reid, Schwartz and Foster simply provide further evidence that if one desired to employ bayonet style locking elements such as a chimney to receive a radial protrusion and a receiving cavity into which the radial protrusion is received for completing the locking after turning the protrusion through a narrowed transition region, that it would have been an obvious matter of choice and or design to employ these conventional locking features to the cake container taught by Kalmanides depending on the desired degree of locking strength required.

It is noted that claim 5 also recites the structural limitation that each dimple receiving region is formed by a radially outward deformed region of said cover peripheral wall. The references applied above evidence the conventionality of bayonet style locks and teach the concept of providing radial deflecting of a protrusion for the purpose of placing the protrusion in a receiving cavity that secures the protrusion in place (and thus locks a cover and base element together). However, the references relied on above appear silent in this particular structure of a radially outward deformed dimple receiving region on the cover peripheral wall.

Nevertheless, it is noted that Gasbarra et al. teaches in figure 6, for instance, a cover member that comprises radially outward deformed regions (figure 6, item 62). It is noted that Gasbarra et al. even further teaches wherein the protrusion on the base member (34) snaps radially into the corresponding recess on the cover member when twisted.

Podel has been further relied on to teach radially outward deformed regions on the cover member, which receive protrusions from the base member when the cover is rotated around the base (see figures 1 and 2, for instance).

Schwartz '355 similarly has been relied on for teaching wherein the closure member comprises the radially outward deformed region (figure 1, item 36).

Amico has been further relied on to teach a first and second member, wherein the receiving channel comprises an additional indent into which the protrusion has been secured (see figure 4, item 38 and figure 5, item 44).

Therefore, in view of the art taken as a whole, employing a radially outwardly deformed region that receives a protrusion from a base member and further locks the protrusions on the base member in place has been a conventional structure in the art. Since the art previously relied on, when taken as a whole, already teaches rotating a cover member to lock it in place and further teaches wherein a radial deflection occurs when locking the cover onto the base, for the purpose of securing the cover onto the base, to therefore modify the combination and employ a conventional structure for locking a cover member onto a base member, as taught by the applied references, would therefore have been an obvious matter of choice and/or design.

Regarding transparency as recited in claims 5 and 18, it is noted that Kalmanides et al. on column 10, line 64 to column 11, line 6, teach that the housing and display member are both made from transparent plastic material.

Regarding the limitations to claims 5 and 6 of a resilient plastic, it is noted that the plastic taught by Kalmanides is resilient, since the plastic causes an audible snap when locked (column 13, lines 48-67). Furthermore, it is noted that Reid teaches that both the cap (column 2, lines 28-30) and the bottle (column 4, lines 62-65) can be made from plastic and teaches that an audible sound is made when locking. Since Foster already teaches deflecting a protrusion when it is received in the locking channel, it would have been intrinsic that the material would have been resilient. Furthermore, Silk also teaches wherein the lid and base are plastic (column 4, lines 58-64), for the purpose of achieving the deflecting snap locking engagement. Therefore, it is noted that the art readily teaches providing a deflection and a resulting audible sound to facilitate recognition that the two elements have been locked and also teaches passing a protrusion over a transition region, after which the protrusion is locked in place.

Further regarding the particular thickness of the resilient plastic sheets employed for the cover and the base, it is noted that hickness generally equates to rigidity and vice versa. Also the particular thickness would have been wholly dependent and an obvious function of the particular size, shape and weight of the food product placed within the container and the particular durability/rigidity required as a result thereof, as well as the particular degree of deflection required for locking the protrusion in place. Since the art taken as a whole clearly teaches the use of resilient plastic for placing a food product therein and wherein the plastic deflects for the purpose of receiving a protrusion into a receiving cavity for locking the cover and

base together, the particular thickness of the base and cover would have been an obvious result effective variable routinely optimized by experimentation based on the particular durability desired of the container and the particular deflection required for locking. Similarly, regarding claim 19, the particular depth of the transition location would also have been an obvious result effective variable, routinely optimized by experimentation, for the reasons given above, regarding the particular thickness of the cover and base of the container.

Regarding claim 7, which recites that the narrowing is in a radial direction, it is noted that the references to Reid, Silk (figure 9, item 84) and Foster teach a narrowing in a radial direction, wherein after the protrusion passes this narrowing (and thus deflects radially), the protrusion is received in a receiving cavity to lock the two elements such as the cover and base together. Podel (figure 4, items 39 and 38) also teaches this concept, wherein protrusion (figure 5, item 44) is received into a receiving cavity (figure 4, item 38) after passing through a region of narrowed depth (figure 4, item 39) compared to the receiving cavity. As discussed above, Kalmanides et al. already teaches a chimney, a narrowing region through which a protrusion passes and after deflecting to pass through said narrowed region, being received in a similarly shaped receiving cavity. It is noted that even Schwartz '355 teaches a chimney (figure 1, item 36) into which a protrusion is first engaged, and then turning the cover so that the protrusion passes through a radial narrowing (see figure 3, the difference in diameters 2.655 to 2.635; also see item 42 in figure 7, which shows the radial deflection). Nevertheless, the secondary references have

been relied on to teach the various configurations for the deflection, such as radial, as well as the concept of providing this bayonet style lock, wherein the protrusion is inserted into a chimney, passed across a region having a narrowing such that after passing this narrowing the protrusion has been locked in place within a receiving cavity.

(10) Response to Argument

- On page 4 of the Appeal Brief, appellant urges that,

"Although [Kalmanides'] base and cover are formed of plastic sheets, he does not use the resilience of his plastic sheets to urge a dimple radially (toward or away from the axis of his container) against the walls of a dimple-receiving cavity."

This argument has been considered but is not persuasive. It is noted that Kalmanides clearly teaches providing an audible sound as a result of the locking of the protrusion elements on the cover into the corresponding receiving sections of the base (column 13, lines 48-67). Also, based on figure 26 where Kalmanides shows that the triangular portion of the cover slides into a triangular receiving section on the base, the triangular portion must pass through a narrowed region in order to snap into place and thus Kalmanides teaches providing resilient plastic. In any case, it is noted that Reid teaches that both the cap (column 2, lines 28-30) and the bottle (column 4, lines 62-65) can be made from plastic and teaches that an audible sound

is made when locking. Clearly, this audible sound is the result of the movement of the plastic protrusion across the narrowed transition region (figure 4 item 53). This deflection is even further evidenced by Foster, wherein the protrusion must deflect over a narrowed region (figure 7, item 134, for instance) for the purpose of securing the protrusion in place. Furthermore, Silk also teaches wherein the lid and base are plastic (column 4, lines 58-64), for the purpose of achieving the deflecting snap locking engagement. Whether the deflection actually occurs in the cover or base plastic would not have provided a patentable difference over the art, since the art recognized that the purpose of the deflection is to facilitate locking by making it harder for the cover to be unlocked by counter rotation.

- On pages 4-5 of the Appeal Brief, Appellant urges that neither of Draenert nor Elwell disclose radial deflection or outward deformations.

It is noted however, that Elwell and Draenert have been relied on to teach the concept of providing protrusions on a base member and the particular chimney and protrusion receiving cavity on the cover member. Nevertheless, Elwell and Draenert are the first of several secondary references that teach that it has been conventional in the art to employ bayonet style locks for securing a cover to a base portion.

- On page 5 of the Appeal Brief, Appellant urges that the bosses of Reid do not move into a boss-receiving cavity after passing through a chimney that closely receives his bosses. Appellant further urges that although Reid teaches that the cap and bottle can be made of plastic and for creating a snap sound, Reid does not show two sheet plastic parts whose walls can deflect radially to closely receive a dimple formed in another plastic sheet.

This argument has been considered but is not deemed persuasive. It is noted that Kalmanides et al. already teaches using sheet plastic and even teaches employing resilient plastic for the purpose of providing a deflection that results in an audible sound. Kalmanides also teaches providing a chimney that closely receives the receiving protrusion and then passing the protrusion into a similarly shaped receiving cavity. It is noted that Reid, nonetheless, does broadly teach the use of a chimney through which the protrusion is initially received (figure 4, item 43 and 51) and then passing over a narrowing portion, which would deflect, since it results in providing an audible sound (figure 4, item 53) and then receiving the protrusion (43) in a receiving cavity (see figure 4, item 43 when it is to the left of item 53). It is noted that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. In this case, the combination of references (not only Reid alone) clearly teaches the use of vertical and radial configurations when providing bayonet style locking, wherein the deflection to secure the protrusion occurs either of vertically or radially. Since the art recognized employing radial deflection and radial receiving regions for securing the protrusions in a locked configuration and since the art also employed vertical deflection of protrusions and subsequent receiving cavities for the protrusion, the particular orientation, either radial or vertical, for the deflection and locking features would have been an obvious matter of choice and/or design, routinely optimized by

experimentation depending on the particular strength required in the locking features.

- Further on page 5 of the Appeal Brief, Appellant urges regarding the Foster reference that neither the sprayer or the cap is of a deformed plastic sheet and Foster does not rotate a dimple into a cavity or rely on radial deformation of a thin plastic sheet.

These arguments have been considered but are not persuasive. It is noted that although Foster might not disclose the use of plastic, it is noted that Foster, in figure 7 and column 6, lines 7-13 and lines 28-33 teaches tabs that extend radially from the bottle neck across which lugs 116 must pass. When the lugs pass over these radial narrowing regions, the lug falls into recess 136 and resists circumferential and vertical movement. In order for this to occur, it would have been obvious to one having ordinary skill in the art that a certain degree of deflection would have to have occurred. In any case, it is noted that Kalmanides and Reid already teach the concept of deflection of plastic material for the purpose of locking a cover and base together. Foster provides even further evidence that it was conventional in the art to lock a cover to a base, by employing a chimney type portion through which a protrusion passes, and further providing a narrowing (figure 7, item 134) over which a protrusion must pass, and after which the protrusion rests in a receiving cavity which resists circumferential and vertical movement (column 6, lines 16-33).

- Further on page 5 of the Appeal Brief, Appellant urges that Silk does not employ a plastic sheet and does not move a dimple along a chimney and then rotate the dimple into a cavity and rely on resilience of both parts.

This argument has been considered but is not persuasive. As discussed above, Silk has been relied on to teach the use of plastic (column 4, lines 58-64) and for snapping a protrusion over a narrowed region and into a receiving cavity for locking the cover and base together. Since the protrusion is snapped over a narrowed portion (figure 9, item 84), it would have been obvious to one having ordinary skill in the art that there would have been a degree of radial deflection as a result of the snap fit locking. It is further noted that Silk does indeed teach a chimney and has been further relied on as evidence of this concept. Regarding the rotation of the dimple into a cavity, it is noted that Silk does teach rotation but includes an additional step of pressing downward after rotation for achieving the secured snap fit lock. Nevertheless, Kalmanides and Reid, as well as Foster as well as the references to Elwell, Draenert, for instance, all teach a rotation which leads the protrusion into a protrusion receiving cavity. The art taken as a whole clearly teaches the use of both radial deflection as well as receiving cavities that are formed as a result of a radial deformation of the cover as evidenced by Amico, Podel and Gasbarra, for instance. Therefore, it is noted that Appellant is not the first to employ radial deformations for the purpose of creating a protrusion receiving cavity in a bayonet lock for a base and cover element. In view of the locking features taught by the cited references, it is noted that the art conventionally employed both a vertical deflecting protrusion which is received into a cavity as well as a radially deflecting

protrusion which is received into a cavity. Therefore, the particular orientation of the deflection and the particular conventional orientation of the protrusion receiving cavities would have been an obvious matter of choice and/or design, routinely optimized by experimentation depending on the degree of locking strength required.

- Further on pages 5-6 of the Appeal Brief, with respect to the Schwartz, Gasbarra,Podel, Schwartz '355 and Amico references, Appellant urges "none of the references show a container base and lid both made of thin (0.02 inch thick) plastic sheeting, one forming a dimple and the other forming a chimney lending to a cavity that closely receives the dimple. None of the references show thin plastic sheets of the base and lid that provide resilience so that the dimple can move into the cavity despite manufacturing tolerances."

This argument has been carefully considered but is not persuasive. It is noted that the particular features that Appellant relies on for the inventive locking features are, a chimney that leads to a cavity, which receives a protrusion and wherein the protrusion passes over a narrowing transition region which results in a deflection of the protrusion and subsequent placement of the protrusion into a receiving cavity, with the result being that the protrusion is securely in place within this receiving cavity thus providing the desired locking of the cover and base member. These have been conventional elements of bayonet locking elements, as evidenced by the art of record. Regarding the particular dimple shape, it is noted that once the art recognized employing a radial protrusion, employing a radially formed protrusion receiving cavity and a radially formed narrowing transition region though which the protrusion (or narrowing) would further deflect radially before "undeflecting" and the protrusion resting in the radial receiving cavity, the particular shape of the protrusion

and the receiving cavity would have been an obvious matter of design. Regarding the use of thin plastic sheets, it is noted that Kalmanides teaches employing plastic sheets for both the cover and base portion.

Regarding the particular thickness, it is noted that this would have been wholly dependent on the particular type, size and weight of the food placed into the receptacle, as well as the particular durability required of the container and thus would still have been an obvious result effective variable, routinely determinable by experimentation. It is noted that both Schwartz '355 and Reid teach different diameter measurements for the plastic containers and covers. See Schwartz '355, column 2, lines 50-63 and column 3, lines 8-49 and Reid, column 4, lines 51-61; column 4, line 65 to column 5, line 8; column 5, lines 37-67; column 6, lines 37-44; column 8, line 63 to column 9, line 13). Both Schwartz '355 on column 5, lines 37-67 teaches that modifications to the dimensions would have been routinely determinable for the ordinarily skilled artisan. Also, Reid also teaches that the particular thickness of the bottle can be varied based on the different dimensions for the diameters and thicknesses disclosed.

- Further on page 6 of the Appeal Brief, Appellant's arguments with respect to claims 6 and 7 are essentially similar. Regarding claims 6 and 7, Appellant urges that the "resilience of the thin plastic sheets that form the base and covering allow deflection to pass the dimple across the transition, if the covering is forcefully turned. None of the references show such a narrowing which a dimple must pass across or show this in a base and cover both made of thin plastic sheets." Regarding claim 7, Appellant urges that "the narrowing resulting from the transition location being in a radial direction. The resilience of the thin plastic sheets that form the base and covering allow radial deflection so the dimple can pass across the transition, if the covering is forcefully turned. None of the references show such a narrowing in a radial

direction, which allows a thin sheet plastic base and covering to deflect radially to pass a dimple across a radial narrowing."

These arguments have been carefully considered but are not persuasive. It is noted that Reid, Schwartz '355 and Foster all teach the use of radial deflections as well as a narrowing through which the protrusion must pass in order to be securely locked into place. For instance, Reid teaches a raised portion which is considered a narrowing (figure 4, item 53) over which the protrusion (43) must pass and then rests in a protrusion receiving cavity (see figure 4, item 43 situated to the left of item 53). Schwartz '355 also teaches this concept of a radial deflection as shown by the flexing of the outer cover, shown by figure 7, item 42 (solid and dashed lines). Also, Amico teach a radial narrowing that leads into a deeper protrusion receiving cavity (see figure 4, item 39 and 38 and figure 5, item 44). Additionally, Foster also teaches this concept, as discussed above with respect to figure 7, for instance. Kalmanides has already been relied on to teach the basic concept of two plastic sheets employed as a cake container wherein the locking mechanism can comprise a chimney, a transition region and a protrusion receiving cavity, which when the protrusion has been placed therein, results in locking of the cover to the base. The secondary references have only been relied on to further evidence that applicant's particular features for the locking mechanism have been conventionally employed and to use these features would have been an obvious matter of choice and/or design, depending on the particular strength required for the locking.

- On page 7 of the Appeal Brief, Appellant urges a similar argument with respect to the plastic sheets and radial deflection, with respect to claim 18.

These arguments have been considered but are not persuasive for the reasons given above with respect to claims 6 and 7 and further in view of the references, which teach that radial deflection has been a conventional expedient in the art of providing locking features, for the purpose of providing a secured locking of a protrusion within a protrusion receiving cavity after passing the narrowing transition portion.

- On page 7 of the Appeal Brief, Appellant urges that none of the references to Reid, Silk, Foster and Amico show or describe the limitation of claim 19, which describes the radial depth of the transition location being less than the radial depth of the dimple-receiving cavity.

It is noted however, that Kalmanides already teaches a protrusion receiving cavity that conforms to the shape of the triangular protrusion, for the purpose of securing the triangular shaped protrusion in a similarly shaped receiving cavity. In view of this, once the art recognized providing radial dimple receiving cavities, such as that taught by Podel, Schwartz '355, Foster, Reid and Silk, the particular dimensions of the dimple receiving cavity would have been an obvious result effective variable, routinely determinable by experimentation depending on the particular degree of locking strength required. Regarding the references to Reid, Silk, Foster and Amico, Appellant further urges that Reid does not teach a thin plastic sheet but rather glass or thick plastic. It is noted however, that Reid teaches

various thickness for the different portions of the bottle, as evidenced on column 4, lines 51-61; column 4, line 65 to column 5, line 8; column 5, lines 37-67; column 6, lines 37-44; column 8, line 63 to column 9, line 13.

Regarding Silk, Appellant urges that the radial deflection taught by Silk is different from the thin plastic sheets that can locally deflect. It is noted that Appellant's urging is not clear as to how this is different. In any case, it is noted that Silk has been relied on as further evidence that the concept of radial deflection as a result of passing a radially extending protrusion over a narrowing has been a conventional practice in the art of locking two elements together for the purpose of securing those two elements together.

Regarding Foster, Appellant urges that Foster does not show resilient thin plastic sheets or a narrowing between two recesses. This argument has been considered but is not persuasive. As discussed above, it is noted that Foster has also been relied on to teach a radial narrowing, since the protrusion (item 134) extends radially and is the element that the protrusion (item 120) must pass over before being housed in a receiving section (item 136) in order to be secured against circumferential and vertical movement (column 6, lines 28-33)

Regarding Amico, Appellant urges that this radial narrowing is not clear. It is noted however, that in figure 4, the depth of the receiving cavity is deeper than the depth of the remainder of the chimney and the horizontal channel. Therefore, when the protrusion (figure 5, item 44) is engaged with the channel, a rotation would result

in a passing through the narrowed portion and then snapping into the protrusion receiving portion (figure 4, item 38 - indentation (see column 4, lines 3-18).

Regarding Kalmanides, Appellant urges that Kalmanides obtains locking by the trailing edge 33 of his flange passing the leading edge 32 of his locking tab and then lying behind it. It is noted however, that Figure 9 of the Kalmanides reference has not been relied on to teach the concept of bayonet locking and deflection of a plastic sheet for the purpose of snapping a protrusion into a protrusion receiving cavity, for the purpose of securing a cover to a base element. As discussed above, Kalmanides teaches this locking feature on figure 26, for instance.

- Further on page 8 of the Appeal Brief, Appellant urges that the "Examiner cited all above 11 references but did not mention the specific relevance of those other than Gasbarra, Podel, Schwartz, Amico and Kalmanides.

It is noted however, that the references to Elwell, Draenert, Foster, Silk, Reid, along with Kalmanides, Gasbarra, Podel, Schwartz and Amico have all been discussed in the rejections above to teach that the particular concept of a radial bayonet locking feature with radial deflection has been a conventional locking feature in the art. Once this was recognized, the particular shape and dimensions of the radial locking features would have been an obvious result effective variable, routinely determinable by experimentation depending on the particular desired degree of locking strength required. Regarding the use of 11 references, it is noted that the secondary references are all related in that they teach bayonet locking for securing a cover and base together. It is further noted that, reliance on a large

number of references in a rejection does not, without more, weigh against the obviousness of the claimed invention. Where teachings relied upon to show obviousness were repeated in a number of reference, the conclusion of obviousness was strengthened. See In re Gorman, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991). In this case, various orientations of bayonet locking, as well as Appellant's claimed chimney, radially formed protrusion, radially formed narrowing transition that deflects radially, have all been conventional expedients in the art for achieving a secured lock between two elements. In view of these teachings, it is noted that Appellant's claimed locking features would have been obvious to one having ordinary skill in the art, for the reasons given above.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Viren Thakur/

Examiner, Art Unit 1794

Conferees:

Steve Weinstein

/Steve Weinstein/

Primary Examiner, Art Unit 1794

William Krynski

/William Krynski/

Quality Assurance Specialist, TC 1700